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## THE NESTING OF THE HEERMANN GULL

By PINGREE I. OSBURN

WITH TWO PHOTOS

IN the spring of 1909, it was my privilege to be one of a party to make a cruise down the west coast of Mexico in search of interesting forms of bird and animal life. The primary object of my trip was to discover, if possible, the nesting place of the Heermann Gull (*Larus heermanni*). Every year these birds have migrated south in the spring and were generally supposed to breed somewhere in the Gulf of Lower California. After a sea voyage of over 1500 miles (from San Diego, California) they were located breeding on a remote rock off the coast of the State of Jalisco, Mexico, in about the parallel 18° N.

Prior to the time of the visit of our party little or nothing was known of the habits of these birds in their breeding grounds, and the observations taken in this colony have brought to light many facts.



NESTING GROUNDS OF THE HEERMANN GULL: ISLANDS OFF  
COAST OF JALISCO, MEXICO

No Heermann Gulls were seen on the trip until found at their breeding grounds, nor were any noted flying about at any distance from the nests on the rock, which would indicate that they do not wander away from their colony in the nesting time, as do the Western Gulls (*Larus occidentalis*). When approaching a colony of Western Gulls its nearness is evidenced by occasional individuals sailing about for miles on all sides of their nesting grounds. Not so with *Larus heermanni*. They were not seen farther than one-half mile from the colony. Possibly this is one reason why their nesting grounds are easily overlooked. This fact was impressed upon me clearly while getting acquainted with the species in its native haunts. We were anchored two days near the nesting rock before the first bird was seen.

My first glimpse of the birds was when an adult flew near enough to our schooner for identification, and I at once determined to make an effort to find more; for what was an adult doing in these waters at the height of nesting time, April 10? The next morning (April 11) I noted a few flying about over a low flat rock a little distance from our anchorage. It was here that I first found them breeding

and here that the majority were nesting, altho there were about nine pairs on another rock lying fifty yards to the north, and a few scattered individuals which I will mention later.

As our boat neared the island a few more, beautifully plumaged adults came out to greet us, and when I climbed over the top of the cliff which surrounds the rock, I came in view of the entire colony.

The rock was about twenty-five feet high and fifty by one-hundred-and-fifty feet across, with a plat of coarse bunch grass a foot high in the center, and along the edge a barren strip of white rock broken up here and there with crevices and boulders. The rock contained thirty-one pairs of breeding birds, ascertained after a careful count. The birds in the nesting grounds behaved in much the same manner as the Western Gulls, but were tamer, swooping down within a foot of my head and alighting nearby, while I was photographing in the colony.

Their cry was an oft-repeated "cow-awk", "cow-eek", given when high in the air, and a rapid guttural "caw-ca-ca-ca" when hovering near the nest.

No adults were noted eating other gulls' eggs, nor did I see them disturb the Blue-footed Boobys (*Sula nebouxii*) which were nesting on a nearby island. They were beautiful with graceful flight and striking plumage.

The plumage of the adult birds is too well known to warrant a description here. Of the series now in my collection (one skin of which was taken by Mr. Chester Lamb, my companion and co-worker on this trip) both sexes are identical, with pure white heads. One downy young was taken on my second visit to the rock, three days later, April 14. At this age the bird shows a soft downy coat, of a light creamy color on the underparts, which merges into vinaceous cream buff on the mantle and nape; crown and occiput slightly specked with black; nape clear cream; entire back and rump heavily spotted with blackish slate color; wings, under side plain white, upper parts spotted with blackish; flanks pale cream spotted with blackish. Measurements in millimeters, length 148, wing 30, bill 17. Bill hooked, nostril near middle, section on upper mandible back of nostril dark, remainder light brownish. A few immatures were seen flying near the rock. Their entire plumage was soft, sooty gray, except blackish on tail and wing quills.

A cursory survey of the rock showed that it was steep on all sides. The birds undoubtedly preferred the level ground for a nesting place, as only one set was found on this cliff.

The nests were located usually between boulders, or nestled down in the bunch grass in the center of the rock. Those in the grass were usually well made of sticks, dry grass and weeds, and sometimes with a slight lining of feathers. They were much better made and more compact than those of the Western Gull. Several nests in my collection still show their original shape and construction; also retain the strong odor peculiar to these birds on their nesting grounds. A few sets were found with almost no nest, simply a cup-shaped cavity scantily lined with shells and a stick or two. The nests were well scattered about over the rock, no close grouping being evident. The measurements of the nests average, in inches: outside width 10; depth  $2\frac{1}{2}$ .

No other species of Gull was seen in company with the Heermann Gulls, and none within hundreds of miles of these islands.

The eggs of this species are unlike those of other Gulls, and can be distinguished with a series. My series show the usual variation in color and size so common in eggs of the genus *Larus*. In shape they are in general identical with others of this genus. Sets vary considerably in size, and average smaller than those of *Larus occidentalis*. The first visit to the rock was on April 11. At this time about one-

third of the eggs were heavily incubated. The remainder were in all the lesser stages. The sets contain two and three eggs in about equal numbers, with a possible majority of three. Extreme sets measure in millimeters:  $63 \times 44$ ;  $61 \times 41$ ;  $60 \times 42$  (this was the largest); the smallest measures  $58 \times 41$ ;  $56 \times 42$ ;  $53 \times 36$  (this last egg was the smallest of the series). Of the series of sets of three the average measurements are:  $58.1 \times 41.3$ ;  $58 \times 41.4$ ;  $57 \times 40.2$ ; the largest set of two is  $60 \times 43.2$ ;  $59.2 \times 42.1$ ; and the smallest measures  $58.4 \times 41$ ;  $56.1 \times 41.3$ ; average for sets of two,  $59 \times 40$ ;  $58 \times 40.3$ . The average sized egg is  $58 \times 40.2$ .

The eggs show the greatest variation in color. The general ground color is pearl gray with a very slight creamy tinge. In some the ground color is ashy gray and in others light bluish gray. All the eggs are spotted and blotcht, the markings showing no particular rule for location at one end or the other. They have faint lavender spots which are covered with smaller but more distinct spots of grayish brown, umber, grayish blue and dark lavender. They are very rarely scratcht with fine lines, but occasionally the spots and splashes show a trend to a lengthwise direction. A few examples also have faint wreaths about the large end. Where



TYPICAL NEST OF THE HEERMANN GULL

this occurs the area inside the wreath is usually void of heavy markings and decorated only with faint irregular lavender spots. In extreme examples the eggs range from one egg, which is indistinctly speckt with cinnamon brown and markt evenly with faint lavender, to an egg which has a ground color twice as deep as the egg just mentioned, and heavily splotcht with dark olive and dark lavender. There is also one set of three which is especially unlike the others in that the eggs are smaller and more elongated, both ends of the egg being almost identical in shape. This set is differently markt also. The spots are dingy and not clearly defined as in the remainder of the series. In all, they are the handsomest eggs of any species of this genus which I have ever seen.

Besides the colony described, which was the most prominent, there was a small one of nine pairs on a rock fifty yards north of the main rock. There were also a few individuals nesting in remote locations on another rock. These nests were difficult to locate and this was only possible by watching the bird until she hovered near the nesting site. It seemed unusual to find Gulls nesting in separate pairs, while a colony was near.

The islands are rocky and barren except for occasional bunches of grass and wild pineapples, and are a wild, picturesque habitat for the Heermann Gull.

*Pasadena, California.*

## FALL NOTES FROM EASTERN KANSAS

By ALEX. WETMORE

THE material upon which this paper is based, consists of nearly six hundred skins, collected by Mr. Charles D. Bunker and myself on two collecting trips in the same region.

This locality is known as Washington Creek, and lies about eight miles in a direct line southwest of Lawrence, Kansas, in the edge of the hills, and is back from the main traveled roads running into the hills. The draws are timbered with oaks and elms, with a thick undergrowth of buck-brush and briars in places. There are two creeks here: Washington Creek, and a smaller one known as Hasty Creek, both lying to the west. One line of hills is bare of timber, being covered with sumachs and tall scattering weeds, with numerous rocky points projecting from it, and a level valley lying below. Along Washington Creek are some fair-sized growths of heavy bottom timber.

Our two trips were made from September 14 to 21, 1907, and September 11 to 18, 1908, and were made in the interests of the Kansas University Museum, our object being to collect birds mainly, together with what mammals offered themselves. Camp was made both times in a draw where it widened between two hills, and a tent was pitched to sleep in, while we used an old two-roomed cabin for a work room. The mornings were spent in collecting and the afternoons in preparing specimens.

During 1907 we had very poor weather, as the wind blew almost constantly from the southwest, and it was excessively hot. On only two or three days was it quiet, and the birds in consequence remained well under cover. We had one light rain during the night, which, however, did not hinder our field work. The second year the weather was more in our favor, as what wind there was came mostly from the north, and favored rather than hindered migration. One light rain fell during this year also.

Most of our collecting was done within a radius of three miles of camp, and in this territory we had a great variety of ground, ranging from small marshes to barren hill-tops. The tall trees about camp attracted the birds, and many of our meals were interrupted by a chase after a desirable specimen, which frequently was pursued into the nearby timber.

It is a matter of some interest to note the difference in the results obtained on the two trips. During 1907, with the strong southwest winds, migration was practically almost at a standstill, and a great share of the birds obtained were the resident species. Several of the residents, such as *Hylocichla mustelina*, *Spiza americana*, and *Setophaga ruticilla* were taken, while *Ictinia mississippiensis* could have drifted up from the south under the impulse of that same wind. The season seemed less advanced, too, as was shown in the plumage of the birds, many of those taken being in full molt.

The next year this was entirely changed. Many of the smaller migrants were